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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,529

03/24/2006

Changling Liu

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5464

441

7590

09/03/2008

SMITH, GAMBRELL & RUSSELL

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WASHINGTON, DC 20036

EXAMINER

KATAKAM, SUDHAKAR

ART UNIT

PAPER NUMBER

1621

MAIL DATE

DELIVERY MODE

09/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,529

Applicant(s)

LIU ET AL.

Examiner

Sudhakar Katakam

Art Unit

1621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 9-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the application

1. Receipt of applicant's remarks and arguments filed on 13th June 2008 is acknowledged.
2. Claims 6-8 have been cancelled.
3. Claims 1-5 have been amended.
4. With regard to the 103(a) rejection, the applicants' arguments are not found persuasive. However, upon further consideration, in view of applicants' amendments to the claims, a new ground(s) of rejection is made in view of different interpretation of the previously applied reference, and provide an explanation of the rejection. With regard to the applicants' statement of unexpected results in the remarks, however, unexpected results should be filed in the form of a declaration.
5. Claims 1-5 and 9-11 are discussed on the merits in this action.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

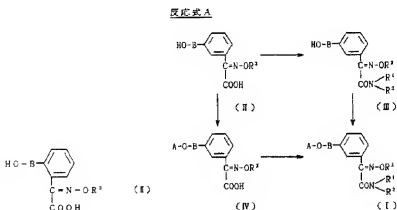
1. Determining the scope and contents of the prior art.

Art Unit: 1621

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

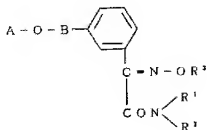
8. Claims 1-5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hayase et al** (JP 04182461 A) in view of **O'Mahony et al** (US 6,034,121) and **Fischer et al** (US 6,906,007).

Hayase et al teach compounds of the following formulae and their preparation:




Hayase et al also teach a new fungicidal alkoxyiminoacetic acid amide derivative of formula:


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


, wherein R₁ and R₂ are each

hydrogen or lower alkyl, R₃ is lower alkyl, A is , and optionally substituted by at least one of oxo, halo, phenyl or divalent lower alkylene and B is a bond or -CH₂- group [see Abstract, full translation of article is pending].

The differences between the instant claims and the **Hayase et al**

- (i) is the position of group  on the benzene ring.
- (ii) the use of the compound as an insecticide.

With regard to (i) of above, **Hayase et al** clearly showed the group  at two possible positions [see page 3]. Therefore, **Hayase et al** compounds make the instant claims obvious.

With regard to (ii), **O'Mahony et al** teach similar substituted coumarines, in which X is halogen, CN, NO₂, alkyl etc. in a similar fungicidal compound. **Fischer et al** teach that similar coumarines are useful as fungicides and insecticides [col. 32, lines 62-65].

In summary, **Hayase et al** provided sufficient guidance to make the coumarine based fungicides for an ordinary artisan in the art. **O'Mahony et al** showed that in a

similar fungicidal compound, in which coumarines can be substituted by various functional groups. Fischer et al showed a heterocyclic compound which can be used as a fungicide as well as insecticide.

Therefore, a skilled person in the art would be motivated to utilize **Hayase et al** teachings taking the advantage of **O'Mahony et al** teachings to make the instant applicants compound with a reasonable expectation of success, since it is a routine experimental process to add the additional groups on the known compound or core structure for an ordinary skilled person in the art.

Changing such parameters is prima facie obvious because an ordinary artisan would be motivated to explore the analogous compounds through a routine experimentation. Merely modifying the analogous compounds for a known compound is not a patentable modification absent a showing of criticality.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

10. No Claim is allowed.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhakar Katakam whose telephone number is 571-272-9929. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sudhakar Katakam/
Examiner, Art Unit 1621

/SHAILENDRA - KUMAR/
Primary Examiner, Art Unit 1621